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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/828,343	04/06/2001	Andrew Joseph Dillon	029641R	1716

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EXAMINER

WINAKUR, ERIC FRANK

ART UNIT

PAPER NUMBER

3736

DATE MAILED: 08/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

SM.

**Office Action Summary**

Application No.

09/828,343

Applicant(s)

DILLON ET AL.

Examiner

Eric F Winakur

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
 Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 May 2002.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 8, 10-14, 16 and 17 is/are rejected.
- 7) ☒ Claim(s) 6, 9, 15 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other:

## **DETAILED ACTION**

### ***Reissue Applications***

1. Applicant's submission of a corrected Preliminary Amendment that complies with 37 CFR 1.173(b) is noted.
2. Applicant's surrender of the original Patent is noted.

### ***Claim Rejections - 35 USC § 102***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1, 2, 5, 7, 8, 10 - 14, 16, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Diab et al. (USPN 5,782,757). Diab et al. teach an optical probe (Figures 29A, 29B) that includes a rigid, opaque saddle (cradle member) formed from black plastic (Figures 16, 18, 20; column 15 - 16) that includes a photodetector within a chamber. The optical probe further includes a flexible, adhesive element (column 23, line 50 - column 24, line 34) that contains an emitter. In use, the emitter is aligned opposite the detector and flanges from the probe adhesively attach to a subject's finger without stressing the fingertip. Diab et al. (column 15, lines 62 - 65) further teach that the positions of the emitter and detector can be interchanged.

### ***Claim Rejections - 35 USC § 103***

5. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diab et al. as applied to claims 1, 2, 5, 7, 8, 10 - 14, 16, and 17 above. Diab et al. teach that their cradle is formed from a rigid, opaque material, such as black plastic but do not specifically teach that this is a molded polyolefin plastic, or polypropylene in particular.

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However, these are merely well known plastic materials. It would have been within the skill level of the art at the time of the invention to implement the device of Diab et al. with a cradle constructed from polypropylene, since Diab et al. teach that the cradle is constructed from black plastic and it has generally been held to be within the skill level of the art to identify and use well known materials that meet the requirements of a teaching.

### ***Response to Arguments***

6. Applicant's arguments filed June 11, 20002 have been fully considered but they are not persuasive. Applicant contends that the Examiner has inadvertently combined two separate embodiments of the Diab et al. probe in a manner that is neither suggested by, nor consistent with the teachings of the reference. Applicant first points to the discussion in Diab et al. of the rigid, opaque saddle or cradle member formed from black plastic as illustrated in Figures 16, 18, and 20, which is taught to be attached to a subject via adhesive. Applicant contrasts this with the claimed subject matter of an emitter that is "mounted within the web of the support structure". Although Diab et al. detail attachment of the cradle member with adhesive, the embodiment of Figures 16, 18, and 20 was merely cited to provide a teaching of the cradle member formed from black plastic; it was not intended to provide a teaching of the attachment of the cradle to a patient by an adhesive.

Applicant notes that the embodiment of Figs. 29A-29B of Diab et al. represents another embodiment containing a flexible adhesive element and contends that it should be clear to one of ordinary skill in the art that this embodiment contemplates a

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"completely flexible" adhesive probe which can be wrapped around a human finger. Applicant further contends that there is no suggestion at all within Diab et al. for a combination of the flexible web which mounts the emitter of the embodiment of Figs. 29A and 29B with the rigid cradle embodiment of Figs. 16, 18, 19, and 20, and that Diab et al. teach away from such an embodiment. Applicant's attention is drawn to the specification of Diab et al. (Summary of the Invention, column 3; also, see descriptions of particular embodiments including column 15 - 16) which repeatedly describes and illustrates the detector to be located within a rigid housing that has the properties of minimizing light piping (optical coupling) and ambient light interferences, and suppressing motion artifacts. All of the probes disclosed by Diab et al. (Figures 3 - 28) include a "chamber" element to provide these properties. Further, the optical probe illustrated in Figs. 29A and 29B is also taught to be configured to provide one or more of i) minimization of undesirable movement, ii) minimization or prevention of light piping, iii) minimizing of decoupling, and iv) the low noise chamber configuration (column 23, lines 50 - 64). In addition, the embodiment of Figures 29A and 29B is described and illustrated as including "detector assembly 2035" and "optical cavity 2150", which are non-flexible elements; the optical cavity is disclosed as useable with any of the bases having a chamber formed therein (column 27, lines 40 - 43). This clearly refers to the previously described probe assemblies, including that of Figures 16, 18, 19, and 20. Thus, it is inapt to characterize the Figure 29A and 29B embodiment as "completely flexible", and further is inapt to contend that the reference teaches away from an

embodiment that includes a flexible web and a rigid cradle. In view of the above, the rejection based on the Diab et al. reference is deemed proper.

With regard to the rejection of claims 3 and 4, it is noted that Applicant agrees with the basis of rejection set forth above.

The previously presented combination of Diab et al. in view of Swedlow et al. has been withdrawn. As Applicant has pointed out, Diab et al. provides the basis for interchanging the positions of the optical elements, thus making the combination with Swedlow et al. unnecessary.


***Allowable Subject Matter***

7. Claims 6, 9, 15, and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric F Winakur whose telephone number is 703/308-3940. The examiner can normally be reached on M-Th, 7:30-5; alternate Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 703/308-2582. The fax phone numbers for the organization where this application or proceeding is assigned are 703/305-3590 for regular communications and 703/305-3590 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703/308-0858.

  
ERIC F. WINAKUR  
PRIMARY EXAMINER